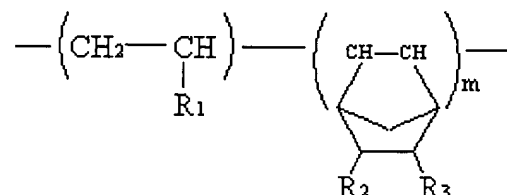<u>What is claimed is:</u>

1. A light guide plate for liquid crystal displays comprising a cyclic olefin copolymer material, the cyclic olefin copolymer material being represented by the formula:
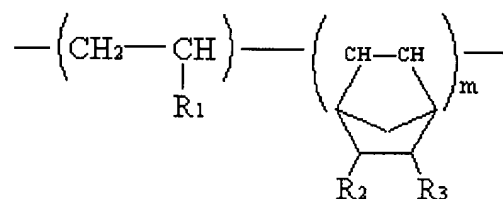
$$-\left(CH_2-\underset{\underset{R_1}{|}}{CH}\right)-\left(\underset{\underset{R_2 \quad R_3}{}}{CH-CH}\right)_m-$$

wherein each of R_1, R_2 and R_3 is independently selected from the groups consisting of hydrogen and aliphatic saturated groups, and m is an integer which is equal to or greater than 1.

2. The light guide plate in accordance with claim 1, wherein the cyclic olefin copolymer material is a copolymer of alpha-olefin monomers and cycloolefin monomers.

3. The light guide plate in accordance with claim 2, wherein the cyclic olefin copolymer material is polymerized at a temperature between minus 78 to 200 degrees Centigrade and at a pressure from 0.5 to 70 Pa.

4. The light guide plate in accordance with claim 3, wherein the cyclic olefin copolymer material is polymerized in a catalyst of metallocene.

5. The light guide plate in accordance with claim 4, wherein a molar ratio of said monomers to the metallocene catalyst is in the range of 10^1 to 10^{12}.

6. The light guide plate in accordance with claim 3, wherein the temperature is preferably from minus 50 to 150 degrees Centigrade.

7. The light guide plate in accordance with claim 3, wherein the pressure is preferably from 1 to 50Pa.

8. The light guide plate in accordance with claim 3, wherein the cyclic olefin

copolymer material is polymerized in a catalyst of π complex compound catalyst.

9. The light guide plate in accordance with claim 8, wherein a molar ratio of said monomers to the π complex compound catalyst is in the range of 10^1 to 10^{12}.

10. A method of making a light guide plate for a liquid crystal display, comprising a step of providing the light guide plate which is made of a cyclic olefin copolymer material, the cyclic olefin copolymer material being represented by the formula:

$$-\left(CH_2-\underset{\underset{R_1}{|}}{CH}\right)-\left(\underset{\underset{R_2\quad R_3}{}}{CH-CH}\right)_m-$$

wherein each of R_1, R_2 and R_3 is independently selected from the groups consisting of hydrogen and aliphatic saturated groups, and m is an integer which is equal to or greater than 1, and wherein diffusion points are formed on a surface of said light guide plate.